

Work Order ID 72822

Tuesday, August 16, 2011 10:33:24 AM



Page 1

Item ID: D2891-1

Accept



Setup Start



Revision ID:

Stop



Item Name: 2.25 Support

Start Date: 8/16/2011 Start Qty: 2.00



Cust Item ID:

Required Date: 8/26/2011 Req'd Qty: 1.00



Customer:

Reference:

Approvals:

Process Plan:

Date: 11-08-16

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

Draw Nbr

Revision Nbr

D2891

B

100

0.00



HAAS CNC VERTICAL MACHINING #1

HAAS 1

Memo

0.00

HAAS CNC vertical machine #1

1-Machine as per Folio FA046
2-Deburr

SL 11-09-20

20

φ

110

0.00



QC2- Inspect parts off machine FAI/FAIB

QC

Memo

0.00

Quality Control

SL 11-09-20

20

φ

120

0.00



QC8- Inspect parts - second check

QC

Memo

0.00

Quality Control

SL 11/09/21

20

φ

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 72822

Tuesday, August 16, 2011 10:33:24 AM



Page 2

Item ID: D2891-1

Accept



Setup Start



Revision ID:

Stop



Item Name: 2.25 Support

Start Date: 8/16/2011 Start Qty: 1.00



Cust Item ID:

Required Date: 8/26/2011 Req'd Qty: 1.00



Customer:

Reference:

Run Start



Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Stop



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

130

0.00



HandFXtube

Memo

0.00

Hand Finishing Crosstubes

Per note 8 on page 1 of dwg D2891, Prep inner concave surface of support and apply 3M Scotch-Weld as per dwg. 24H of cure time. B# 118144

W 11 10 03 03 20

140

QC3- Inspect Part Finish

0.00



QC

Memo

0.00

Quality Control

B 11-10-03 20

170

Identify as per dwg & Stock Location: x-tube

0.00



Packaging

Memo

0.00

Packaging

Asly

W 11 10 03 20

W/O:		WORK ORDER CHANGES						
DATE	STEP		PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)							
DATE	STEP		Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
				Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 72822

Tuesday, August 16, 2011 10:33:24 AM



Page 3

Item ID: D2891-1

Accept



Setup Start



Revision ID:

Stop



Item Name: 2.25 Support

Start Date: 8/16/2011 Start Qty: 1.00



Cust Item ID:

Required Date: 8/26/2011 Req'd Qty: 1.00



Customer:

Reference:

Run Start



Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Stop



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

180

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

11/10/5

UMF 11-10-04

W/O:		WORK ORDER CHANGES						
DATE	STEP		PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)							
DATE	STEP		Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
				Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Tuesday, August 16, 2011 10:33:32 AM

Page 1

Work Order ID: 72822



Parent Item: D2891-1



Parent Item Name: 2.25 Support

Start Date: 8/16/2011

Required Date: 8/26/2011

Start Qty: 1.00

Required Qty: 1.00

Comments:

IPP C 02.11.26 Added P/O KJ

IPP D 08.03.19 Re-format EC verified: DD

IPP Rev:E

11.08.04 as per dwg rev.B DD verf:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

DSK076

Manufactured

No

110

Each

14.0000

0.5

0.5



D2891-1 TURNING DETAIL

21-09-20

Location

Loc Qty

Loc Code

MAT060

14

56038

4

69955

10

72677

3

7

W/O:			WORK ORDER CHANGES					
DATE	STEP		PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:			WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP		Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
				Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD		Work Order:	22822
Description: Ø2.250 Support		Part Number:	D2891-1
Inspection Dwg: D2891	Rev: A1	Page 1 of 1	

FIRST ARTICLE INSPECTION DIMENSION SHEET

☒ First Article ☐ Prototype

				Record Actual Dimensions				
Dim	Min	Max	Go/No Go Gauge	1	2	3	4	5
HAAS Section								
AA	0.188	0.193		.188	.188	.188	.188	.188
AB	0.240	0.260		.249	.249	.250	.249	.252
AC	0.115	0.150		.125	.125	.125	.125	.125
AD	0.040	0.060		.050	.050	.050	.050	.049
AE	0.010	0.020		.015	.015	.015	.015	.015
AF	0.240	0.260		.250	.250	.250	.250	.250
AG	0.290	0.310		.300	.300	.300	.300	.300
AH	0.115	0.150		.137	.137	.137	.137	.137
AI	0.454	0.474		.466	.466	.466	.466	.467
AJ	2.779	2.789		2.784	2.784	2.784	2.784	2.784
AK	0.240	0.260		.250	.250	.250	.250	.250
AL	1.002	1.042		1.032	1.032	1.036	1.036	1.034
AM	0.053	0.073		.063	.063	.063	.063	.063
AN	0.257	0.262		.257	.257	.257	.257	.257
AO	1.663	1.683		1.675	1.675	1.675	1.675	1.676
AP	0.053	0.073		.063	.063	.063	.063	.063
AQ	0.022	0.042		.032	.032	.032	.032	.032
AR								
AS								
AT								
Accept/Reject								

Measured by:	DL	Date:	11-09-19
Audited by:	B.A	Date:	11/09/21
Prototype Approval:		Date:	

Rev	Date	Change	Revised by	Approved
A	02.12.12	New Issue	KJ/RF	
B	08.04.21	Reformat	KJ/JLM	

DART AEROSPACE LTD		Work Order: 72822
Description: Ø2.250 Support		Part Number: D2891-1
Inspection Dwg: D2891	Rev: A1	Page.1 of 1

FIRST ARTICLE INSPECTION DIMENSION SHEET

☒ First Article ☐ Prototype

				Record Actual Dimensions				
Dim	Min	Max	Go/No Go Gauge	✓6	✓7	✓8	✓9	✓10
HAAS Section								
AA	0.188	0.193		.188	.188	.188	.188	.188
AB	0.240	0.260		-.252	-.250	-.250	-.251	-.251
AC	0.115	0.150		.125	.125	.125	.125	.125
AD	0.040	0.060		-.049	-.050	-.050	-.048	-.048
AE	0.010	0.020		.015	.015	.015	.015	.015
AF	0.240	0.260		-.250	-.250	-.250	-.250	-.250
AG	0.290	0.310		-.300	-.300	-.300	-.300	-.300
AH	0.115	0.150		.137	.137	.137	.137	.137
AI	0.454	0.474		.467	.469	.469	.466	.466
AJ	2.779	2.789		2.784	2.784	2.784	2.784	2.784
AK	0.240	0.260		-.250	-.250	-.250	-.250	-.250
AL	1.002	1.042		1.033	1.035	1.034	1.032	1.025
AM	0.053	0.073		-.063	-.063	-.063	-.063	-.063
AN	0.257	0.262		-.257	-.257	-.257	-.257	-.257
AO	1.663	1.683		1.676	1.676	1.676	1.675	1.675
AP	0.053	0.073		-.063	-.063	-.063	-.063	-.063
AQ	0.022	0.042		-.032	-.032	-.032	-.032	-.032
AR								
AS								
AT								
Accept/Reject								

Measured by: SL Date: 11-09-19

Audited by: H.A Date: 11/09/21

Prototype Approval: _____ Date: _____

Rev	Date	Change	Revised by	Approved
A	02.12.12	New Issue	KJ/RF	
B	08.04.21	Reformat	KJ/JLM	

DART AEROSPACE LTD		Work Order: 72822
Description: Ø2.250 Support		Part Number: D2891-1
Inspection Dwg: D2891	Rev: A1	Page 1 of 1

FIRST ARTICLE INSPECTION DIMENSION SHEET

☒ First Article ☐ Prototype

				Record Actual Dimensions				
Dim	Min	Max	Go/No Go Gauge	11	12	13	14	15
HAAS Section								
AA	0.188	0.193		.188	.188	.188	.188	.188
AB	0.240	0.260		.250	.250	.250	.250	.251
AC	0.115	0.150		.125	.125	.125	.125	.125
AD	0.040	0.060		.048	.048	.050	.050	.051
AE	0.010	0.020		.015	.015	.015	.015	.015
AF	0.240	0.260		.250	.250	.250	.250	.250
AG	0.290	0.310		.300	.300	.300	.300	.300
AH	0.115	0.150		.137	.137	.137	.137	.137
AI	0.454	0.474		.466	.466	.466	.466	.466
AJ	2.779	2.789		2.784	2.784	2.784	2.784	2.784
AK	0.240	0.260		.250	.250	.250	.250	.250
AL	1.002	1.042		1.030	1.023	1.037	1.031	1.030
AM	0.053	0.073		.063	.063	.063	.063	.063
AN	0.257	0.262		.257	.257	.257	.257	.257
AO	1.663	1.683		1.674	1.674	1.676	1.676	1.679
AP	0.053	0.073		.063	.063	.063	.063	.063
AQ	0.022	0.042		.032	.032	.032	.032	.032
AR								
AS								
AT								
Accept/Reject								

Measured by: J Date: 11-09-20

Audited by: B.A Date: 11/09/21

Prototype Approval: Date:

Rev	Date	Change	Revised by	Approved
A	02.12.12	New Issue	KJ/RF	
B	08.04.21	Reformat	KJ/JLM	

DART AEROSPACE LTD		Work Order: 72802
Description: Ø2.250 Support		Part Number: D2891-1
Inspection Dwg: D2891	Rev: A1	Page 1 of 1

FIRST ARTICLE INSPECTION DIMENSION SHEET

☒ First Article ☐ Prototype

				Record Actual Dimensions				
Dim	Min	Max	Go/No Go Gauge	16	17	18	19	20
HAAS Section								
AA	0.188	0.193		.188	.188	.188	.188	.188
AB	0.240	0.260		.251	.250	.250	.251	.251
AC	0.115	0.150		.125	.125	.125	.125	.125
AD	0.040	0.060		.051	.050	.050	.051	.051
AE	0.010	0.020		.015	.015	.015	.015	.015
AF	0.240	0.260		.250	.250	.250	.250	.250
AG	0.290	0.310		.300	.300	.300	.300	.300
AH	0.115	0.150		.137	.137	.137	.137	.137
AI	0.454	0.474		.466	.466	.466	.467	.467
AJ	2.779	2.789		2.784	2.784	2.784	2.784	2.784
AK	0.240	0.260		.250	.250	.250	.250	.250
AL	1.002	1.042		1.036	1.034	1.029	1.032	1.033
AM	0.053	0.073		.063	.063	.063	.063	.063
AN	0.257	0.262		.257	.257	.257	.257	.257
AO	1.663	1.683		1.679	1.679	1.677	1.677	1.677
AP	0.053	0.073		.063	.063	.063	.063	.063
AQ	0.022	0.042		.032	.032	.032	.032	.032
AR								
AS								
AT								
Accept/Reject								

Measured by: JD Date: 11-09-20

Audited by: HA Date: 11/09/21

Prototype Approval: _____ Date: _____

Rev	Date	Change	Revised by	Approved
A	02.12.12	New Issue	KJ/RF	
B	08.04.21	Reformat	KJ/JLM	

NOTES:

1) MATERIAL: 17-4 PH STAINLESS STEEL, H900 OR H925 CONDITION
MIN UTS = 170 KSI (38 HRC)
(REF DART SPEC. D6104)

2) FINISH: NONE

3) TOLERANCES: PER DART QSI 018 (REF X.XXX = ± 0.010) UNLESS OTHERWISE NOTED

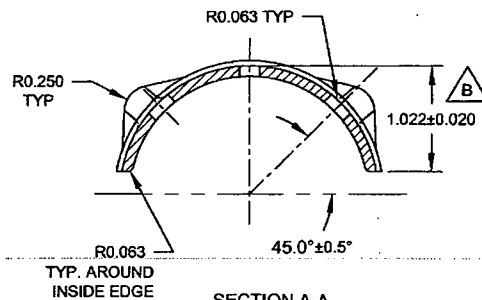
4) UNITS: INCHES UNLESS OTHERWISE NOTED

5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX

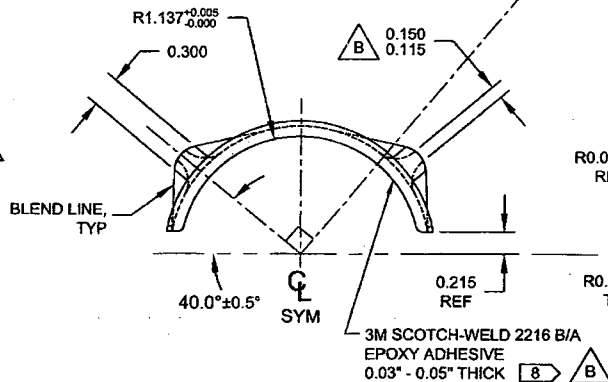
6) IDENTIFICATION: DART LOGO (PER DART SUPPLIED GRAPHIC) AND PART NUMBER IN THIS AREA WITH 0.125 HIGH LETTERING 0.010-0.020 DEEP, PER DART QSI 044 6.3.

7) WEIGHT: 0.38 lb

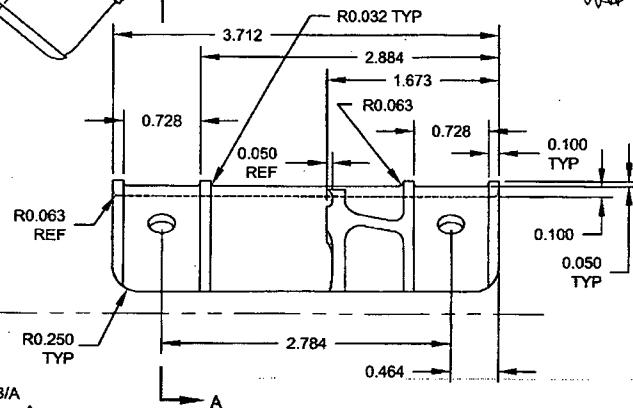
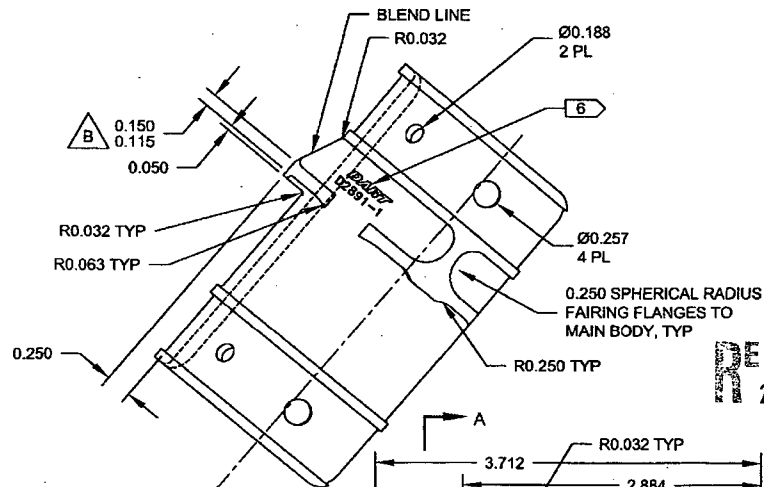
8) FOR THE ENTIRE INNER CONCAVE SURFACE:
ABRADE SURFACE WITH 400-GRIT SANDPAPER. REMOVE RESIDUE WITH MEK (OR EQUIVALENT). APPLY 0.03" TO 0.05" THICK LAYER OF 3M SCOTCH-WELD 2216 B/A ADHESIVE TO MATING SURFACE OF SUPPORT. ALLOW TO CURE FOR 24 HOURS.



SECTION A-A



D2891-1 SUPPORT



RELEASED
2011-07-28

UNCONTROLLED COPY
ENGINEERING
RETURN TO
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
72822

11-08-14

B	RMV FINISH, ADD 3M 2216, ADD H925 MAT'L OPTION, UPDATE TOLERANCE (ZN D4-1, B4-1, B6-1)	CP	11.07.15
A	NEW ISSUE	CP	00.11.17
REV.	DESCRIPTION	BY	DATE
DESIGN	92		
DRAWN	92		
CHECKED	ASS		
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	11.07.15		

DART AEROSPACE LTD
HAWKESBURY, ONTARIO, CANADA

DRAWING NO. D2891
REV. B
SHEET 1 OF 1
TITLE Ø2.250 SUPPORT
SCALE NTS

COPYRIGHT © 2000 BY DART AEROSPACE LTD
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR REPRODUCED IN ANY MANNER WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

